

THE STATUS OF *CORIMELAENA* WHITE, 1839, *EUCORIA* MUL-  
SANT AND REY, 1865, AND *ALLOCORIS* McATEE AND  
MALLOCH, 1933  
(Heteroptera: Pentatomidae)

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In 1933 McAtee and Malloch published A Revision of the Subfamily Thyreocorinae of the Pentatomidae (II). This truly monumental work removed this subfamily from the status of one of the least known and most difficult groups of all the Heteroptera to one of taxonomic order and stability which have been attained in few comparable subfamilies. However, during the course of a recent study of material in the United States National Museum collection and the Francis Huntington Snow collection at the University of Kansas, I have had occasion to review the grounds on which these authors dropped the name *Corimelaena* White and replaced it with *Allocoris* "nom. nov." The evidence at hand indicates that this action was not warranted and that *Allocoris* must become a synonym of *Corimelaena*. It might also be noted here that for reasons set forth in this paper the subfamily name Thyreocorinae is replaced by Eucoriinae.

**Corimelaena** White, 1839

*Corimelaena* was established in 1839 by Adam White (2, p. 539), *Tetyra lateralis* F. being designated as type. For the most part this generic name has been used for the American species of the group including *lateralis* (F.), or *gillettii* Van Duzee. In 1917 Van Duzee (7, pp. 13-17) cited all these species under the name *Thyreocoris* Schrank; 1801; however, in 1919 (9, pp. 206-207) Malloch stated that *scarabaeoides* (L.), the type of *Thyreocoris*, is not congeneric with the American species and reestablished *Corimelaena* for these species except those which he placed in his new genus *Cydnooides* and in *Galgupha* A. & S. This arrangement was followed by all workers except Horvath, 1919 (9, pp. 212-214) until McAtee and Malloch, 1933 (II, p. 358). In the latter paper it was contended that the genotype of *Corimelaena*, *Tetyra lateralis* F., is unidentifiable and *Allocoris* "nom. nov.," genotype *Corimelaena gillettii* Van Duzee, was employed for this group. In effect *Allocoris* was proposed as a new genus for what McAtee and Malloch treated as *Corimelaena* of authors. Thus it is evident that should *lateralis* be shown as identifiable and as an older name for *gillettii*, *Allocoris* and *Corimelaena* become isogenotypic through synonymy and *Corimelaena*, as the older name, must be accepted as the valid name of the genus.

The original description of *Tetyra lateralis* Fabricius, 1803 (*I*, p. 142), is as follows:

"*T. atra*, elytris albis: vitta lata atra. Habitat in Carolina. Mus. Dom Bosc.

"Statura parva *T. pallipes*. Corpus glabrum atrum, nitidum elytris solis albis: vitta lata atra, quae tamen apicem haud attinget. Alis vero complicatis sub scutello margo elytrorum albus tantum apparet. Ale albohyalinae."

Translated this reads:

Black, elytra white: vitta broad, black. Habitat, Carolina. Mus. Dom. Bosc.

In size, a small *T. pallipes*. Body glabrous, black, shining, the elytra alone white: a broad black vitta, which, however, scarcely attains the apex. Since the wings, indeed, fold under the scutellum, the margin of the elytra appears white thus far [exposed portion of elytra white]. Wings whitish hyaline.

McAtee and Malloch (II, p. 369) contend that this description cannot apply to a species "characterized by chiefly black elytra with the pale vitta strictly confined to the costa \* \* \*" It is on the strength of this discrepancy that *lateralis* is declared unidentifiable. I believe this conclusion to be based upon a misinterpretation of Fabricius' description. That Fabricius based his description upon a specimen having the forewings entirely exposed is indicated by his remark, "Alis vero complicatis sub scutello." This happens frequently when a pin is thrust through the scutellum. When the wing is thus exposed it is possible to consider the coriaceous portion as white with a broad median black band pointed apically and not quite attaining the apex of the corium (see fig. 3). This condition is more pronounced in some individuals than in others, but normally there is a white band between the "black vitta" and the hyaline, membranous portion of the wing. McAtee and Malloch, by interpreting the description as applying to the wing in the normal resting position, failed to see the pale inner band which is then covered by the scutellum. Fabricius' further elaboration "margo elytrorum albus tantum apparet" can be explained only as an attempt to describe how he believed the wings would appear in a resting position. He erroneously believed they would be covered to the extent of those of ("*T. pallipes*") = *Brachyplatys testudonigra* (Degeer), with which he compares this species.

McAtee and Malloch also state that *lateralis* "may be a prior term for *pulicaria*"; however, Fabricius' statement, "In size, a small *T. pallipes*," eliminates this species from consideration. The species recognized by Stål, Signoret, Montandon, and others as (*Tetyra pallipes* F. = *Brachyplatys pallipes* (F.)) = *B. testudonigra* (Degeer) measures from 4 to 6 mm. in length. Two specimens in the United States National Museum collection,

determined by Signoret, are 5.25 mm. in length. The species treated here as *lateralis* ranges from 3.0–4.5 averaging 4 mm. in length. *Pulicaria* averaging barely 3 mm., could hardly have been compared with "*T. pallipes*" in the above manner. All other species can be eliminated on grounds of description and distribution.

From the above discussion it would therefore seem that *lateralis* (F.) is identifiable and identical with the form considered by McAtee and Malloch as *lateralis* of authors, and for which they resurrected *gillettii* Van Duzee. It follows that, with *gillettii* Van Duzee a synonym of *lateralis* (F.), *Allocoris* and *Corimelaena* become isogenotypic through synonymy, and *Corimelaena*, as the older name, becomes the valid name of the genus.

#### EUCORIA Mulsant and Rey, 1865

*Eucoria* was established in 1865 by Mulsant and Rey (3, pp. 12–14) with *marginipennis* described at the same time as the only included species. Questionably placed by Puton, 1881 (5, p. 5), and Horvath, 1919 (8, pp. 212–213), *Eucoria* was declared unidentifiable by McAtee and Malloch, 1933 (11, p. 391). Again the problem is that of determining the identity of the genotype, here *marginipennis* Mulsant and Rey. Fortunately this species is much more adequately described than *Tetyra lateralis* F. and without doubt would have been definitely placed years ago except for uncertainty as to the origin of the specimen upon which the description was based and the general lack of knowledge concerning the subfamily.

Puton, 1881 (5, pp. 5–6), seems to have been the first to recognize the adventitious nature of the specimen involved, and pointed out that it was sent to Mulsant and Rey by a Mr. Wachanru "who dealt particularly with insects in imported products." He adds that he has a specimen of the same species in his collection "found in Marseilles in foreign wool" and that Mr. Signoret gave him "under the name of *Thyreocoris pulicaria* Germar, an insect from Brazil<sup>1</sup> identical to mine, but Mr. Reuter wrote me from Berlin that the type of Germar has spinose tibiae." Horvath, 1919 (8, p. 212), went so far as to use *Eucoria*, placing *Corimelaena marginella* Dallas, *C. extensa* Uhler, *Thyreocoris championi* Distant, *T. montanus* Van Duzee, and two new species here. Not mentioning Puton's work he stated that *Eucoria marginipennis* Muls. & Rey is the genotype and probably is a synonym of *Odontoscelis pulicarius* Germ.

<sup>1</sup>Undoubtedly a specimen of *Corimelaena tibialis* (F.). This species was confused by early workers, including Germar, with *pulicaria* (Germar). Mulsant and Rey's description of the antennae is sufficient, however, to distinguish *marginipennis* from *tibialis*.

From this action it appears, as Van Duzee, 1923 (10, p. 303), points out, that Horvath either overlooked *Corimelaena* White or did not believe *lateralis* and *pulicaria* to be congeneric.

McAtee and Malloch (11, p. 391) avoided the entire issue by declaring *marginipennis* unidentifiable. While admitting that the description "does for the most part agree" with *pulicaria* they pointed out that "tibia not spined" is one of the principal key characters of Mulsant and Rey's new genus, and, therefore, *marginipennis* could not be a *Corimelaena* in which the tibia is spinose. This line of reasoning breaks down at two important points. In the first place Mulsant and Rey qualify the statement made in the key when they say in their generic diagnosis "Cuisses et tibiae inermes, ou à peu pres." Secondly it should be pointed out that they were using for comparison *Thyreocoris scarabaeoides* (L.) (see figs. 1 and 2). In this species the tibial spines are strongly developed, and when compared with *pulicaria*, where these spines are, for practical purposes, absent on the fore tibiae except at the apices and appear as little more than strengthened hairs on the remaining tibiae, it seems entirely possible that the expression femora and tibiae without spines or *nearly so* could be applied.

This premise being accepted, *marginipennis* is congeneric with *lateralis* in the sense used by White, therefore making *Eucoria* a synonym of *Corimelaena*. Once *marginipennis* is recognized as belonging in this genus, specific placement appears to be a relatively easy matter. The following descriptive remarks, translated freely, are selected from Mulsant and Rey's description as the bases for recognition of *marginipennis*.

Length, 2.8 mm.—width, 1.6 mm.; \* \* \* Pronotum slightly curved along a line up to three-fifths of its lateral margin, sinuate between this point and the lateral angles, \* \* \* elytra dirty white or reddish on the exocorium and the posterior half of the mesocorium, \* \* \* the second (antennal segment) equal to a fifth of the third; \* \* \* tibiae without spines or almost so.

*Corimelaena pulicaria* (Germar) and *C. championi* Distant are the only known species to which the characters set forth above would seem to apply. *C. pulicaria* is an exceedingly common species ranging from Massachusetts west to British Columbia and south to Guatemala. *C. championi* is known only from the type series described from Mexico. In view of these facts it is here submitted that *Eucoria marginipennis* Mulsant & Rey, 1865, is a synonym of *Corimelaena pulicaria* (Germar), 1839.

The recognition of *Eucoria* assumes additional importance since it involves the subfamily name Eucoriens Mulsant & Rey, 1865 (3, p. 11), which is the oldest supergeneric name used for this group of insects. The use of Thyreocorinae (McAtee

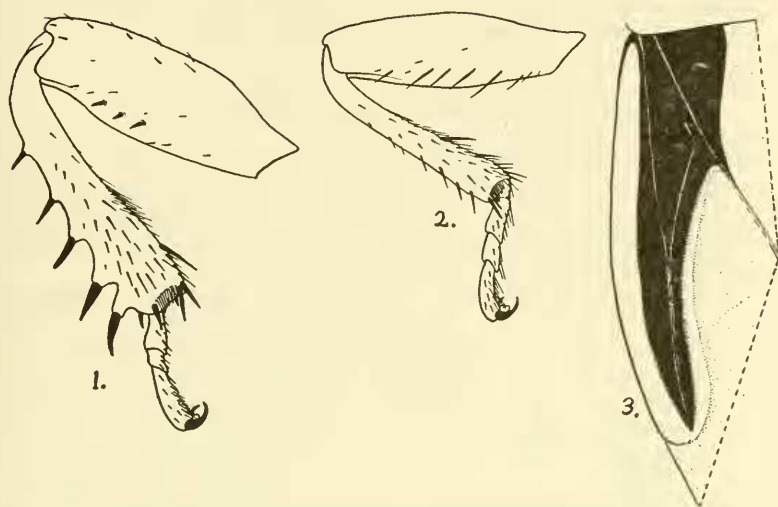


Fig. 1. Foreleg of *Thyreocoris scarabaeoides* (L.); Fig. 2. Foreleg of *Corimelaena pulicaria* (Germar). Fig. 3. Section of forewing including coriaceous portion, *Corimelaena lateralis* (F.).

and Malloch as well as others) is based upon the principle of accepting the oldest known genus as the type. While this method of fixing family names has been vigorously advocated by a number of authors it is not obligatory (Opinion 133, International Commission for Zoological Nomenclature), and apparently most zoologists have not employed it. The usual procedure is to accept as type the genus on which the oldest supergeneric name (vernacular names not excluded) is based. Most authors, however, exclude such names if the genus involved now stands in synonymy. A recent development in supergeneric nomenclature, and one with which I concur as promoting ultimate stability, is that proposed by Sabrosky, 1939 (*I2*, pp. 600-603), and followed by China, 1943 (*I4*, p. 235), which would retain the family name when the type genus is a true synonym. Following this rule *Eucoriinae*, based on *Eucoriens* Mulsant & Rey, 1865, should be used instead of *Corimelaeninae* based on *Corimelaenidae* Uhler, 1871 (*I*, p. 471).

#### SUMMARY OF SYNONYMY

*Eucoriinae* Mulsant and Rey, 1865 (*Eucoriens*)

(= *Corimelaeninae* Uhler, 1871 (*Corimelaenidae*)), n. syn.

(= *Thyreocorinae* Van Duzee, 1907 (*Thyreocoridae*)),

n. syn.

*Corimelaena* White, 1839

(= *Eucoria* Mulsant and Rey, 1865), n. syn.

(= *Allocoris* McAtee and Malloch, 1933)

*Corimelaena lateralis* (F., 1803)

(= *Allocoris gillettii* (Van Duzee, 1904))

*Corimelaena pulicaria* (Germar, 1839)

(= *Eucoria marginipennis* Mulsant and Rey, 1865), n. syn.

With the exception of the following species, the new combinations resulting from the synonymizing of *Allocoris* with *Corimelaena* have already been established by Torre-Bueno (13, pp. 191-196):

(*Allocoris corallina* McA. & M.) = *Corimelaena corallina* (McA. & M.)

(*Allocoris digitata* McA. & M.) = *Corimelaena digitata* (McA. & M.)

(*Allocoris elegans* McA. & M.) = *Corimelaena elegans* (McA. & M.)

(*Allocoris limata* McA. & M.) = *Corimelaena limata* (McA. & M.)

*Allocoris gillettii* subsp. *mexicana* McA. & M.) = *Corimelaena lateralis* subsp. *mexicana* (McA. & M.)

(*Allocoris micans* McA. & M.) = *Corimelaena micans* (McA. & M.)

(*Allocoris palmeri* McA. & M.) = *Corimelaena palmeri* (McA. & M.)

(*Allocoris signoretti* McA. & M.) = *Corimelaena signoretti* (McA. & M.)

*Corimelaena tibialis* (F.) (= *Allocoris tibialis* (F.)) is not a new combination, having been used by Uhler in 1886 (6, p. 2); however, his citation should be synonymized with *Corimelaena incognita* (McAtee and Malloch).

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**A new name for *Acantholoma* Stal (Hemiptera: Scutelleridae).**

It has recently been shown in Neave's Nomenclator Zoologicus (vol. I, p. 16, 1939) that *Acantholoma* Stål, 1867 (Oefversigt Vetensk. Akad. Förhandl. XXIV: 491), is preoccupied by *Acantholoma* Castelnau, 1843 (Ess. Silur. Amér. Sept., p. 23) in Trilobita. *Acantholomidea* is therefore proposed as a new name for Stål's genus. *Acantholoma denticulata* Stål, 1870, is the genotype and only known species belonging to the genus.—R. I. SAILER.